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(54) Title: CASE-HARDENING OF STAINLESS STEEL

(57) Abstract: The invention relates to case-hardening of a stainless steel article by means of gas including carbon and/or nitrogen, whereby carbon and/or nitrogen atoms diffuse through the surface into the article. The method includes activating the surface of the article, applying a top layer on the activated surface to prevent repassivation. The top layer includes metal which is catalytic to the decomposition of the gas.







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A. CLASSIFICATION OF SUBJECT MATTER
I PC 7 C23C8/22 C23C8/26 C23C8/32 C23C8/38 According to International Patent Classification (IPC) or to both national classification and IPC B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) C23C IPC 7 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal, WPI Data, PAJ C. DOCUMENTS CONSIDERED TO BE RELEVANT Category ° Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. NL 1 003 455 A (RIJKSUNIVERSITEIT X 1-3,6-11 GRONINGEN TE GRÖNINGEN) 2 March 1998 (1998-03-02) page 5, line 30 -page 6, line 13; claims 1,2,7,9-15,18 X US 4 013 487 A (RAMQVIST LARS H ET AL) 1,2,4-6, 22 March 1977 (1977-03-22) 8-11 column 2, line 13 -column 5, line 7 Х DATABASE WPI 1,2,4-6, Section Ch, Week 198408 8-11 Derwent Publications Ltd., London, GB; Class M13, AN 1984-045734 XP002262970 & JP 59 006367 A (NICCHI KK), 13 January 1984 (1984-01-13) abstract -/--Further documents are listed in the continuation of box C. Patent family members are listed in annex. Special categories of cited documents: "T" later document published after the International filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier document but published on or after the international "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled "O" document referring to an oral disclosure, use, exhibition or other means document published prior to the international filing date but later than the priority date claimed "&" document member of the same patent family Date of the actual completion of the international search Date of mailing of the international search report 2 2 12 2003 26 November 2003 Name and mailing address of the ISA

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